



WEST RIDGE RESOURCES, INC.

P.O. BOX 902
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May 3, 1999

Ms. Pamela Grubaugh-Littig, Permit Supervisor
Utah Coal Program
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: West Ridge Mine MRP 007/041 Revised page for Chapter 5

Dear Pam:

Enclosed are four copies of a single page revision dated 05/03/99 for the West Ridge Mine Permit (007/041). The 5th copy was submitted to Pete Hess at the Price Field Office.

The page to be changed is page 5-9 in Chapter 5. This change clarifies the type of disturbed area perimeter markers to be used at the West Ridge minesite. Included with this package are the C1-C2 forms that reference this submittal.

Please call me if you have any questions.

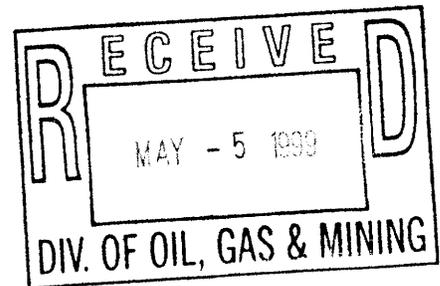
Sincerely,



Jean Semborski
Environmental Coordinator

pc: Pete Hess

Attachments



#2
Amer

99A

RIDGE Resources, Inc. proposes to use a Carbon County public road for access to the mine site from State Highway 123.

521.180 Support Facilities

No additional support facilities will be constructed within the permit area.

521.200 Signs And Markers

Signs and markers will be posted, maintained, and removed by the WEST RIDGE Resources, Inc. Signs and markers will be a uniform design that can be easily seen and read, will be made of a durable material, and will conform to local laws and regulations. Signs and markers will be maintained during all activities to which they pertain.

Mine and permit identification signs will be placed at each point of public access to the permit area from public roads. The mine and permit identification sign(s) will indicate the permittee's name, address, phone and permit number. The signs will be retained until after release of all reclamation bonds for the permit area.

521.250 Perimeter Markers

A suitable marker (such as a red or yellow steel, wood or fiberglass post or brightly colored rope tied around a tree trunk) will be used to mark the perimeter of the disturbed area prior to conducting mining activities. The proposed disturbed area is depicted on most of the 100 scale maps regardless of subject covered by each map.

521.260 Buffer Zone Markers

By regulatory definition (i.e. drainage area greater than one square mile) the left fork of C Canyon is classified as an ephemeral drainage as it has a drainage area of 231 acres. The right fork is classified as an intermittent drainage by regulatory definition. The drainage are for this fork is just over one square mile, at 687 acres. A stream gauge located in the right fork channel never detected any channel flow even during heavy precipitation events in the summer of 1997.

The right and left fork drainages will be culverted beneath the mine yard facilities; flows will be released down stream from the mine office pad. A sediment pond will be used to treat site drainage to prevent intermingling with the undisturbed area drainage. A stream buffer zone sign will be posted at the upper end of the right fork of the mine yard and below the office pad to indicate a stream buffer zone.

521.270 Topsoil Markers

Signs will be posted to identify stockpiled topsoil materials.

APPLICATION FOR PERMIT PROCESSING

<input type="checkbox"/> Permit Change	<input type="checkbox"/> New Permit	<input type="checkbox"/> Renewal	<input type="checkbox"/> Transfer	<input type="checkbox"/> Exploration	<input type="checkbox"/> Bond Release	Permit Number: PRO/007/041
Title of Proposal: Perimeter Markers, Chapter 5 revised page 5-9 dated 05/03/99						Mine: WEST RIDGE MINE
						Permittee: WEST RIDGE Resources Inc.

Description, include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation specialist.

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres <input type="checkbox"/> increase <input type="checkbox"/> decrease.
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	2. Is the application submitted as a result of a Division Order? DO # _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	4. Does application include operations in hydrologic basins other than as currently approved?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	6. Does the application require or include public notice/publication?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	9. Is the application submitted as a result of a Violation? NOV # _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain: _____
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	11. Does the application affect the surface landowner or change the post mining land use?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	15. Does application require or include soil removal, storage or placement?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	17. Does the application require or include construction, modification, or removal of surface facilities?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	18. Does the application require or include water monitoring, sediment or drainage control measures?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	19. Does the application require or include certified designs, maps, or calculations?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

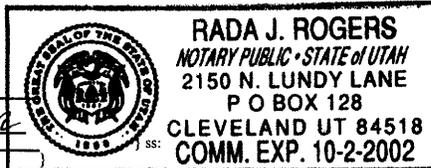
Attach 5 complete copies of the application.

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.

Signed - Name - Position - Date
Jan Kumbroli ENVIR. COORD. 5/3/99

Subscribed and sworn to before me this 3rd day of May, 19 99.

Rada J. Rogers
 Notary Public



My Commission Expires: 10/2/2002
 Attest: STATE OF Utah COUNTY OF Cahoon

Received by Oil, Gas & Mining
ASSIGNED TRACKING NUMBER

R645-301-520 OPERATION PLAN**R645-301-521 GENERAL**

WEST RIDGE Resources, Inc. holds federal coal leases SL-068754 and UTU-75862 and the Penta Creek fee lease, totaling 4,371.93 acres in the West Ridge area of eastern Carbon County. WEST RIDGE Resources, Inc. has signed an option agreement with the State of Utah (School and Institutional Trust Lands Administration) for rights to mine coal on Section 16, T. 14 S. R. 13 E. These areas cannot be mined until the leases are granted and permits issued. Refer to Map 5-4B, Mining Projections - Extended Reserves.

The mine, as proposed, will consist of one longwall and two continuous miner sections. The mining sequence for the first five year term is shown on Map 5-4A, Mining Projections. Initial mine production will come from reserves located in the southeastern portion of the existing lease area. If WEST RIDGE Resources, Inc. acquires the state reserves, a permit modification will be submitted to incorporate the new lease area(s) into the existing permit. WEST RIDGE Resources, Inc. will propose to extend the longwall panels onto this new lease area. Panels will be developed to the north and south of the mains, progressing in an eastward direction. With the existing lease, the projected life of the West Ridge Mine is 10 years. However, acquisition of additional state and private coal reserves in the West Ridge area would extend the life of the mine to nearly 15 years. After the economically recoverable reserves within the permit area have been depleted, the portals would be sealed and reclamation of the surface facility area would begin unless additional leases were acquired.

Surface facilities will be located in C Canyon, where the left and right forks converge, in a previously disturbed area. The extent of the previous disturbance includes access roads, outcrop excavations and exploration drill holes. Previous disturbance at this site is estimated to be approximately 1.62 acres. The total proposed surface disturbed area, as delineated by the tan line on the maps, amounts to approximately 29 acres. Actual anticipated disturbance for surface facilities and topsoil stockpiles (within the disturbance area) is estimated at 26.02 acres. This includes approximately 0.79 acres of Carbon County road which has been included in the disturbed area down to the C Canyon gate, and 0.23 acres for the pumphouse area located below the minesite.

An alternate (substitute) topsoil borrow area would be located about 1 ½ miles to the west of the proposed mine site on a ten acre parcel of State School Trust land. This area would not be included unless needed for final reclamation. No surface disturbance would take place at this location until the time of final reclamation. No additional acreage should be required for the project as proposed in this permit application.

521.130 Landownership And Right Of Entry Maps

Ownership boundaries and the names of the present owners of record for surface lands as well as underground are depicted on Maps 5-2, Surface Ownership and 5-3, Subsurface Ownership.

Map 5-4A delineates the federal coal lease SL-068754 and UTU-78562 and the Penta Creek fee lease, totaling 4,371.93 acres held by WEST RIDGE Resources, Inc., which is the area for which WEST RIDGE Resources, Inc. Resources has the legal right to enter and begin coal mining and reclamation operations.

Included in Appendix 5-2 is a letter from Carbon County granting WEST RIDGE Resources, Inc. permission to conduct mining operations within 100 feet of the Carbon County road. This would basically be that segment of road where the road enters the mine facility area.

Also included in Appendix 5-2 is an approval letter from Carbon County, allowing for the periodic closure of approximately 960' of the "C" Canyon Road from the gate to the original mine permit area. The permit area has been extended to the gate, as shown on Plate 4-1.

A public notice has been published providing for request for a public hearing as provided in R645-103-234. A copy of this notice is also included in Appendix 5-2.

521.140 Mine Maps And Permit Area Maps

The permit area proposed to be affected by the coal mining and reclamation operation is shown on Map 5-3. WEST RIDGE Resources, Inc. is presently pursuing acquisition of lease rights to mine on adjacent state and private reserves. Permit renewals will be reapplied for on five year intervals.

521.141 The mining operation has been divided into five year mining blocks in an attempt to show future areas that will be mined under the permit renewals. The mining blocks are shown on Map 5-4B. All projections and timing are preliminary and general in nature and may change in the future depending on mining, marketing, environmental conditions and/or acquisition of additional state and federal reserves.

Surface support facilities in C Canyon will be utilized for the life of mine operations. The proposed mine surface facility area is depicted on Map 5-5, Surface Facility Map. Reclamation of the facilities will be performed following completion of mining activities and sealing of the portals.

521.142 The surface above mined out longwall panels may be subject to conditions associated with subsidence. Subsidence may occur under the mined out area.

R645-301-522 COAL RECOVERY

A Resource Recovery and Protection Plan (R2P2), has been approved by the BLM. The R2P2 will assure that coal mining and reclamation operations are conducted so as to maximize the utilization and conservation of the coal, while utilizing the best technology currently available to maintain environmental integrity, so that re-affecting the land in the future through coal mining and reclamation operations is minimized. Refer to Appendix 5-3 for the R2P2 which includes a discussion of coal resource utilization and conservation.

R645-301-523 MINING METHODS

Both longwall and continuous miner methods will be employed to recover the coal resource. Longwall will be the primary production method, while continuous miners will be used mainly for mine development to support the longwall. The longwall panels shown on Map 5-4B have been laid out to maximize recovery of the primary coal reserves. Continuous miners will be utilized to develop main entries, longwall gate entries, sumps and other similar development areas.

Initial mine production has come from reserves located in the southeastern portion of the existing lease area. If West Ridge acquires these state **and/or private** reserves, a permit modification will be submitted to incorporate these new lease area(s) into the existing permit. West Ridge will propose to extend the longwall panels onto these new lease areas. Panels will be developed to the north and south of the mains, progressing in an eastward direction. Longwall panel layout may change depending on conditions encountered in the underground workings. As longwall mining approaches Grass Trail Reservoir, existing ongoing subsidence monitoring information will be used to determine the angle of draws and subsidence ratio in this area. Based on this information the underground workings will be designed to ensure that the reservoir is not adversely affected by mining activity.

With the existing leases, the projected life of the West Ridge Mine is 10 years. However, acquisition of additional state **and private** coal reserves in the West Ridge area would extend the life of the mine to nearly 15 years. In the unlikely event that non federal reserves cannot be acquired then the mine plan projection will be altered to maximize the economic and recovery of federal coal in the irregular blocks not amenable to mining. After the economically recoverable reserves within the lease area have been depleted, the portals would be sealed and reclamation of the surface facility area would begin unless additional leases were acquired.

The West Ridge mine is being proposed as an average size underground longwall mine by Utah industry standards, producing at an average rate of about 3 million tons per year. Mine production is subject to normal fluctuations depending on operational variables such as

geologic mining conditions, marketing, equipment availability, and/or worker productivity. The mine is expected to produce about 35 million tons of coal from the existing federal leases. An additional 11 million tons of recoverable coal are available on adjacent unleased state ~~and private~~ lands, for a total potential reserve of about 42 million tons. Acquisition of these additional reserves would result in a mine life of nearly 15 years. The existing mine plan assumes that mining in the area northeast of Whitmore Canyon will be limited by heavy cover (plus 3000'). However, if conditions allow, mining activity will continue as far as possible in this direction on federal coal which would be leased in the future.

Full production could be reached by a gradual buildup during the first two years of mining. See Map 5A for mine projections and timing information for the initial mining area. See Map 5B for mine projections and timing information for the future expanded mining area.

Major equipment for the mine will include:

Continuous Mining System:

- Drum-Type Continuous Mining Machine
- Shuttle Cars
- Roof Bolter
- Diesel Scoop Tractor
- Feeder Breaker
- Section Power Center
- Section Auxiliary Face Ventilation Fan

Longwall Mining System:

- Double Drum Shearing Machine
- Armored Face Conveyor
- Hydraulically Activated Shield Roof Support
- Armored Stage Loader and Crusher
- Longwall Power Center
- High Pressure Hydraulic Pumping System

No surface coal mining (strip mining) will be done.

indicates the angle of draw in the West Ridge area is about 15 degrees. A more conservative angle of 20 degrees has been used to project the maximum extent of subsidence for the West Ridge Mine as shown on Map 5-7.

Map 5-7 shows the results of using a 20⁰ angle of draw to identify zones of potential subsidence over the projected mining area. This map depicts several areas in which the potential subsidence may extend slightly beyond the permit area. These areas are on adjacent SITLA ~~and private~~ coal lands which are included in the extended mining projections. ~~Negotiations are presently under way for mining rights to the private coal reserves and~~ The SITLA reserves are presently secured under an option agreement. There is an extremely high probability that these areas will be mined as shown on the extended mine plan depicted by the black projections on Map 5-7. If, for any reason, these adjacent reserves cannot be acquired and mined as shown, the underground longwall panels will be reconfigured as necessary (i.e., shortened and/or narrowed) to ensure that subsidence effects do not extend beyond the permit area onto these adjacent lands. By the time these panels are mined the actual angle of draw characteristic of the West Ridge reserve will have been more accurately determined from actual empirical subsidence monitoring survey measurements and can be used to more accurately configure the longwall panels in those areas. Map 5-7 clearly notes that "longwall panels will be reconfigured to prevent unauthorized subsidence beyond the permit area if extended reserves are not acquired in the future." The mine plan depicted on Map 5-7 has been approved by the BLM as part of the current Resource Recovery and Protection Plan (R2P2).

Wherever feasible, longwall mining has been planned. This will minimize the impacts of subsidence because of the uniform nature of longwall related subsidence.

Support pillars in main entries, permanent air courses and travelways will be developed on 80' x 80' (minimum) centers. Entries will be driven 20' wide leaving 60' x 60' (minimum) remaining pillars. Main entries and air courses will be driven approximately 8' high.

Subsidence Monitoring

Monitoring for subsidence will be conducted to document the effects of mining activities and to develop a model for subsidence prediction. Aerial photography and mapping will be used to monitor subsidence. Aerial photography for subsidence monitoring is commonly used in the industry and is highly accurate.

In order to monitor for subsidence, a network of ground control stations will be located on the surface outside the mining area. Typical locations for the first set of control points for the initial five year mining area are shown on Map 5-7. These control stations will be field surveyed and used for baseline reference data. Additional control points will be added as mining progresses.

INTRODUCTION

The West Ridge property is located in the Book Cliffs Coal Field of central Utah (see Plate 1). This reserve was previously owned first by U.S. Steel and then SOHIO (BP AMERICA) and was historically called the B Canyon property. The name was taken from B Canyon where test entries, driven by Kaiser Steel (late-1950's) from their adjacent mine works, surfaced to the outcrop. The current project envisions C Canyon as the most suitable portal site and consequently the name has been revised to the West Ridge Project named after the prominent ridge overlying the reserve.

Surface facilities are located in C Canyon, where the left and right forks converge. The total proposed surface facility area occupies about 25 acres. This area has been previously disturbed by mine related activities.

West Ridge Resources holds a federal coal lease SL-068754 (2650.67 acres) and UTU-78562 (1646.34 acres), totaling 4,297.01 acres in the West Ridge area of eastern Carbon County. **West Ridge has also acquired rights to mine private (fee) coal located contiguous to these federal leases.** West Ridge has signed an option agreement with the State of Utah (School and Institutional Trust Lands Administration) for rights to mine coal on Section 16, T. 14 S. R. 13 E. ~~Negotiations are under way for mining rights on privately owned reserves along the eastern edge of the property.~~ These **reserves** cannot be mined until the leases are granted and permits issued.

The West Ridge reserves are located immediately northwest of the historic Kaiser Sunnyside Mines. C Canyon is approximately six miles north of the city of East Carbon. Access to the C Canyon minesite is via US Highway 6 from Price to Sunnyside Junction, then east on Utah Highway 123 for four miles to the intersection of the mine access road. The mine access road is a 6.8 mile public road constructed, owned and maintained by Carbon County, extending from Highway 123 to the C Canyon minesite.

The mine consists of one longwall and two continuous miner sections. Initial mine production has begun from reserves located in the southeastern portion of the existing lease area. If West Ridge acquires the state ~~and private~~ reserves, a permit modification will be submitted to incorporate these new reserve areas into the existing permit. West Ridge will propose to extend the longwall panels onto these new reserves. Panels will be developed to the northwest and southeast of the mains, progressing in a northeastward direction. With the existing federal **and fee** leases, ~~the projected~~ life of the West Ridge Mine is 10 years. However, acquisition of additional state ~~and private~~ coal reserves in the West Ridge area would extend the life of the mine to nearly 15 years. After the economically recoverable reserves within the lease area have been depleted, the portals will be sealed and reclamation of the surface facility area will begin.

CFR 3482.1 (c)(3)(ii)

The resource recovery and protection plan shall include a description of the proposed mining operation, including: the methods of mining and/or variation of methods, basic mining equipment and mining factors, including but not limited to, mining sequence, production date, estimated recovery factors, stripping ratios, highwall limits, and number of acres to be affected.

1) Mining method to be used:

Both longwall and continuous miner methods will be employed to recover the coal resource. Longwall will be the primary production method, while continuous miners will be used mainly for mine development to support the longwall. The longwall panels have been laid out to maximize recovery of the primary coal reserves. Continuous miners will be utilized to develop main entries, longwall gate entries, sumps and other similar development areas.

After the gate entries have been driven the length of the panel, the longwall equipment will be moved in. The longwall face will consist of a panline with a chain conveyor to collect the mined coal, a shearer, and hydraulic jacks that support the roof while the shearer cuts the coal. Coal is cut as the shearer makes passes across the face (width) of the longwall panel. Coal is moved by the chain conveyor to the headgate end of the longwall panel. The coal then passes through a feeder/breaker (stage loader) before being transferred to the conveyor system that carries the coal outside. On the west side of the mine the longwall equipment will start on the west end of the panels and mine to the east, i.e., from the extremity of the reserve toward the mains in the middle of the reserve. Mining on the east side would follow the same pattern, from the outside to the interior of the reserve.

Initial mine production has come from reserves located in the southeastern portion of the existing lease area. If West Ridge acquires these state ~~and/or private~~ reserves, a permit modification will be submitted to incorporate these new lease area(s) into the existing permit. West Ridge will propose to extend the longwall panels onto these new lease areas. Panels will be developed to the north and south of the mains, progressing in an eastward direction. Longwall panel layout may change depending on conditions encountered in the underground workings. As longwall mining approaches Grass Trail Reservoir, existing ongoing subsidence monitoring information will be used to determine the angle of draw and subsidence ratio in this area. Based on this information the underground workings will be designed to ensure that the reservoir is not adversely affected by mining activity.

With the existing lease, the projected life of the West Ridge Mine is 10 years. However, acquisition of additional state ~~and private~~ coal reserves in the West Ridge area would extend the life of the mine to nearly 18 years. In the unlikely event that non federal reserves cannot be acquired then the mine plan projection will be altered to maximize the economic recovery of federal coal in the irregular blocks not amenable to mining. After the economically recoverable reserves within the lease area have been depleted, the portals would be sealed and reclamation of

the surface facility area would begin unless additional leases were acquired.

The West Ridge mine is being proposed as an average size underground longwall mine by Utah industry standards, producing at an average rate of about 3 million tons per year. Mine production is subject to normal fluctuations depending on operational variables such as geologic mining conditions, marketing, equipment availability, and/or worker productivity. The mine is expected to produce about 31 million tons of coal from the existing federal and fee leases. An additional 11 million tons of recoverable coal are available on adjacent unleased state and private lands, for a total potential reserve of about 42 million tons. Acquisition of these additional reserves would result in a mine life of nearly 15 years. The existing mine plan assumes that mining in the area northeast of Whitmore Canyon will be limited by heavy cover (plus 3000'). However, if conditions allow, mining activity will continue as far as possible in this direction on federal coal which would be leased in the future.

Full production has been reached by a gradual buildup during the first two years of mining. See Map 5A for mine projections and timing information for the initial mining area. See Map 5B for mine projections and timing information for the future expanded mining area.

2) Basic mining equipment to be used:

Continuous Mining System:

- Drum-Type Continuous Mining Machine
- Shuttle Cars
- Roof Bolter
- Diesel Scoop Tractor
- Feeder Breaker
- Section Power Center
- Section Auxiliary Face Ventilation Fan

Longwall Mining System:

- Double Drum Shearing Machine
- Armored Face Conveyor
- Hydraulically Activated Shield Roof Support
- Armored Stage Loader and Crusher
- Longwall Power Center
- High Pressure Hydraulic Pumping System

3) Mining Sequence:

Refer to Plates 5A and 5B for the proposed mining sequence.

4) Production Date:

The anticipated starting and termination dates of the coal mining and reclamation operation are as follows:

	<u>Begin</u>	<u>Complete</u>
Construction of Surface Facilities	Oct. 1998	Dec. 1999
Begin Initial Mine Production	Jan. 2000	
Add Second CM Unit	May 2000	
Begin Longwall Production	May 2001	
Terminate Mining		Dec. 2017*
Remove Facilities	Jan. 2018*	June 2018*
Regrade Area	July 2018*	Sept. 2018*
Revegetate Site	Oct. 2018*	Nov. 2018*

*This assumes mine life extended through acquisition of adjacent state **and private** coal reserves.

5) Estimated Recovery Factors:

The recovery rate from the West Ridge Mine will depend on a number of factors, including: coal quality, roof conditions, affects of heavy cover, the occurrence of burn and/or weathered coal, the ability to acquire adjacent, unleased reserves, and other variables. As a result of these variable factors, the recovery rate can not be predicted with accuracy. However, if the lease property can be mine as proposed, recovery from leases SL 068754 and UTU 78562 could approach 60% based on the extended mine plan shown on Plate 5B. Recovery from the extended LMU area could also approach 60% based on this same mine plan.

6) Stripping ratios:

No surface coal mining (strip mining) will be done. Therefore there will be no stripping ratios.

7) Highwall limits:

No surface coal mining (strip mining) will be done. Therefore, there will be no operational highwalls. The highwall for the portals for the underground mine will be about 150' long and about 30' high (estimated).

8) Number of acres to be affected:

Approximately 4,382.55 acres will be within the initial permit boundary which includes leases SL 068754 and UTU 78562 **and the Penta Creek fee lease**. Of this acreage, about 29 acres are utilized for surface facilities and structures in C Canyon. The surface facilities should be capable of supporting the life of the mine operations. If additional state **and private** reserves are obtained the LMU mining area could be extended to about 5880 acres.

CFR 3482.1 (c)(4)(i)(B)

The resource recovery and protection plan shall include a plan map of the area to be mined showing LMU boundaries, if applicable;

No LMU is being proposed at this time. If additional adjacent state ~~and private~~ reserves are acquired in the future, an LMU will be formed at that time. Plate 5B shows the extended mine plan and probable area that would be included in a future LMU.

CFR 3482.1 (c)(4)(v)(A)

The resource recovery and protection plan shall include a plan map of the area to be mined showing a general layout of proposed underground mine showing planned sequence of mining by year for the first 5 years, thereafter in 5-year increments for the remainder of mine life,

Plate 5A shows a general layout of the existing and proposed underground mining showing the planned sequence of mining for the first 5 years.

Plate 5B shows the general layout of the proposed underground mining showing the planned sequence of mining for the life of the mine. (This map assumes that additional adjacent state and private reserves will be acquired and combined into an LMU).